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James C. Tiernan

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EXAMINER

CLIFTON, JESSICA L

ART UNIT

PAPER NUMBER

2419

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,739	Applicant(s) TIERNAN ET AL.	
	Examiner JESSICA CLIFTON	Art Unit 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-38 and 40-73 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-38 and 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Acknowledgment receipt of amendment filed 21 April 2009. Claims 1-4, 6-9, 15-16, 21, 24, 26-29, 31-38, 40-43, 46, 49-51, 56-60, 62, 65, 68-69, 71-73 amended, Claims 10-14, 17-20, 22-23, 25, 30, 44-45, 47-48, 52-55, 61, 63-64, 66-67, 70 original. Claims 5 and 39 cancelled. Claims 74-76 new.

Claim Objections

2. Claims 1, 35, 69 are objected to because of the following informalities: The first use of the acronym CPE should be expanded to define CPE as Consumer Premise Equipment. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 35 and 69 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 & 35, line 23 and Claim 69, line 20, recites: "... **update master queues used at the CPE units...**" The specification and accompanying figures do not disclose

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that the CPE contains or updates a master queue. Figure 1A, illustrates a master request queue (72) is contained within the headend control computer (HCC) and the consumer premise equipment (CPE) contains a local request queue (78). Paragraph [0139], discloses that the master request queue is maintained within the HCC. Additionally, the local request queue is stated to be an estimate and/or an erroneous copy of the master request queue. Therefore, the two queues are housed and maintained separately and are not equivalent.

4. Claims 2-4, 6-34, 36-38, 40-68, 70-72, and 74-76 are rejected as being dependent upon rejected claims 1, 35 and 69.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 35, 69 and 73 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. As per claims 1 & 35, lines 22-23 and claim 69, line 20, the phrase “...**in the same manner to update..**” does not clearly define the method to which the updating is to be performed.
6. As per claim 73, lines 6-7, disclose “**a transmitter for sending...and receiving**”. A transmitter is used for transmitting data and does not receive.

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Response to Amendments

Applicant's amendments filed 21 April 2009 with respect to claims 1-4, 6-9, 15-16, 21, 24, 26-29, 31-38, 40-43, 46, 49-51, 56-60, 62, 65, 68-69, and 71-73 necessitated the new ground(s) of rejection presented in this Office action. Applicant's arguments with respect to claims 1-4, 6-38 and 40-73 have been fully considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the

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various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 73 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eng (US Pat. No. 5,963,557) in view of Citta (US Pat. No. 6,034,967) and further in view of Grzeczowski (US Pub. No. 2003/0143946).

As per claim 73, Eng discloses **a consumer premise equipment (CPE) unit for scalable multifunctional network communication** (Fig. 7, subscribers (150)) **between presentation devices and service providers via a headend control computer coupled to the service providers through service provider control subsystems, comprises:**

a transmitter for sending messages to the headend control computer upstream messages via an uplink channel (Fig. 10A, illustrate an upstream transmitter (156). Fig. 7, illustrates upstream control and payload sent from subscriber to the headend) **and receiving from the headend control computer downstream messages via a**

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downlink channel (Fig. 7, illustrates downstream control and payload sent to the subscriber);

means including the transmitter for sending requests via the uplink channel to the headend control computer (Fig. 7, illustrates upstream control packet sent from subscriber to the headend. Col. 4, lines 50-53, reservation request is a control packet);

wherein the headend control computer receives messages from the CPE and other like CPE units (Fig. 7, illustrates multiple subscribers sending data upstream to the headend) and transfers them to the service provider control subsystem **and transfers them to the service provider control subsystems** (Eng, Figure 14, discloses upstream communication provided to the headend media access controller), **and the headend control computer receives messages from the service provider control subsystems and transports them to the CPE units** (Figure 14, discloses that the headend media access controller provides data to be transferred downstream. Figure 7, illustrates the headend sending downstream communication to the subscriber stations).

Eng is silent on **wherein the headend control computer collects received requests in a request queue update message; a receiver for receiving the request queue update message via the downlink channel from the headend control computer; means for detecting absent requests in the request queue update**

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message; and means including the transmitter for resending absent request signals;

which are conventional features in the communications field.

However, Citta, in an analogous art, discloses **wherein the headend control computer collects received requests in a request queue update message; and a receiver for receiving the request queue update message via the downlink channel from the headend control computer** (Fig. 6a, discloses storing reservation requests within a buffer (104). Col. 4, lines 55-67, acknowledgement, sent by the headend, in response to receiving reservation requests to reserve data slots. Col. 12, lines 55-67, acknowledgements, sent downstream from headend, include reserved data slot allocations to the subscriber;

means for detecting absent requests in the request queue update message (Col. 12, line 55-Col. 13, line 10, subscriber determines whether a previously transmitted reservation request was lost due to collision from the downstream data frame which includes acknowledgments);

means including the transmitter for resending absent request signals (Col. 2, lines 50-65, the subscriber re-transmits any data frames that have previously collided).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Eng to include **wherein the headend control computer collects received requests in a request queue update message; and a receiver for receiving the request queue update message via the**

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downlink channel from the headend control computer, as taught in Citta for the purpose of managing timeslots for multiple CPE units.

Eng-Citta is silent on **means for coupling to the presentation devices** which is a conventional features in the communications field.

However, Grzeczowski, in an analogous art, discloses **means for coupling to the presentation devices** (Paragraph [0041], discloses a television to be peripheral equipment coupled to the set-top box. Paragraph [0023], discloses enhanced television viewing provided by the set-top box. Figure 4, illustrates multiple set-top boxes)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Eng-Citta to include **communication between presentation devices and service providers**, as taught in Grzeczowski for the purpose of incorporating a user interface.

As per claim 77, Eng-Citta-Grzeczowski **teach a CPE unit according to claim 73**, Citta further discloses **wherein the uplink channel and the downlink channel are the same channel** (Col. 1, lines 21-36, disclose a common communication channel sharing both upstream and downstream communication). Examiner maintains same motivation to combine as in Claim 73.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA CLIFTON whose telephone number is (571)270-7156. The examiner can normally be reached on Monday-Friday, 8:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JESSICA CLIFTON/
Examiner, Art Unit 2419

/Jayanti K. Patel/
Supervisory Patent Examiner, Art Unit 2419